# МИНИСТЕРСТВО СЕЛЬСКОГО ХОЗЯЙСТВА И ПРОДОВОЛЬСТВИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

Учреждение образования «БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ АГРАРНЫЙ ТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ»

Кафедра иностранных языков № 1

# АНГЛИЙСКИЙ ЯЗЫК ВВЕДЕНИЕ В СПЕЦИАЛЬНОСТЬ

Учебно-методическое пособие

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### МОДУЛЬ «AGRICULTURE IN GENERAL»

#### 1. КОМПЛЕКСНАЯ ЦЕЛЬ МОДУЛЯ

#### Студенты должны:

#### ● знать:

**1 уровень (A):**1) лексический материал по теме «Введение в специальность»; 2) правила образования: а) продолженных времен активного залога (The Continuous Tenses Active Voice); б) причастия I (Participle I), функции и способы перевода; в) герундия (Gerund), функции и способы перевода.

### Максимальная оценка знаний на 1 уровне (репродуктивном) 6 баллов.

**2** уровень (В): характеризовать 1) лексический материал по теме «Введение в специальность»; 2) правила образования: а) продолженных времен активного залога (The Continuous Tenses Active Voice); б)причастия I (Participle I), функции и способы перевода; в)герундия (Gerund), функции и способы перевода.

### Максимальная оценка знаний на 2 уровне (продуктивном) 8 баллов.

**3 уровень (С): характеризовать и анализировать** 1)лексический материал по теме «Введение в специальность»; 2) правила образования: а) продолженных времен активного залога (The Continuous Tenses Active Voice); б)причастия I (Participle I), функции и способы перевода; в)герундия (Gerund), функции и способы перевода.

### Максимальная оценка знаний на 3 уровне (творческом) 10 баллов.

#### • уметь:

1 уровень (А): 1) анализировать иноязычный текст (его структурные, лексические и стилистические особенности) с позиций требований к знаниям 1-го уровня; 2) читать, переводить, понимать на слух тексты по профилю обучения (изучающее чтение); 3) вести общение профессионального и социокультурного характера на английском языке по предложенной модели, сочетая диалогические и монологические формы речи; 4) понимать иноязычную речь в объеме программной тематики; 5) использовать английский язык в качестве инструмента профессиональной деятельности: реферирование и перевод на русский язык профессионально ориентированных текстов.

### Максимальная оценка знаний на 1 уровне (репродуктивном) 6 баллов.

2 уровень (В): 1) анализировать иноязычный текст (его структурные, лексические и стилистические особенности) с позиций требований к знаниям 2-го уровня; 2) читать, переводить, понимать на слух тексты по профилю обучения (изучающее чтение, ознакомительное чтение); 3) вести общение профессионального и социокультурного характера на английском языке в различных стандартных ситуациях, пользуясь правилами речевого этикета, сочетая диалогические и монологические формы речи; 4) понимать аутентичную иноязычную речь в объеме программной тематики; 5) использовать английский язык в качестве инструмента профессиональной деятельности: реферирование и перевод на русский язык профессионально ориентированных и научных текстов.

### Максимальная оценка знаний на 2 уровне (продуктивном) 8 баллов.

**3 уровень (С)**: 1) анализировать иноязычный текст (его структурные, лексические и стилистические особенности) с позиций требований к знаниям 3-го уровня; 2) читать, переводить,

понимать на слух тексты по профилю обучения (изучающее чтение, просмотровое и ознакомительное чтение); 3) вести общение профессионального и социокультурного характера на английском языке в различных нестандартных ситуациях, пользуясь правилами речевого этикета, сочетая диалогические и монологические формы речи; моделировать устное высказывание, используя грамматические явления модуля; 5) понимать аутентичную иноязычную речь сверх программной тематики; 5) использовать английский язык в качестве инструмента профессиональной деятельности: реферирование и перевод на русский язык профессионально ориентированных и научных текстов.

### Максимальная оценка знаний на 3 уровне (творческом) 10 баллов.

- формировать:
- 1) осознание потребности в постоянном самосовершенствовании

### 2. НАУЧНО-ТЕОРЕТИЧЕСКОЕ СОДЕРЖАНИЕ МОДУЛЯ

### 2.1. Словарь – минимум по теме

### **Active Vocabulary (Text A)**

### **NOUNS**

borlov	gun au u	
barley	ячмень	
biofuel	биологическое топливо	
biopharmaceutics	биофармация	
cowpea	вигна китайская, горох коровий	
crop	1) сельскохозяйственная культура	
	2) урожай, жатва; посев	
cultivation	возделывание, выращивание, культивация	
soil cultivation	почвообработка	
engineering	инженерное искусство, техника, инженерия	
equipment	оборудование	
feed	корм, фураж	
fertilizer	удобрение	
fiber	волокно	
forage	еда, корм (для животных), фураж	
grain crop	зерновая культура	
hay	сено	
hide	кожа, шкура	
lard	свиное сало	
legumes	бобовые	
food grain legumes	зернобобовые	
lima bean	лима, лимская фасоль	
livestock	крупный рогатый скот	
livestock	разведение домашних животных	
breeding		
lorry	грузовой автомобиль, грузовик	
machinery	машины; оборудование	
measure	мера, мероприятие	
oat	овес	
oil seed crop	масличная культура	
pesticide	TOOTHOUSE CONTROL THE BODY BY A PROTECTION OF	
pesticide	пестицид, средство для борьбы с вредителями	

plant breedingразведение растений, растениеводствоprocessingобработка, переработкаrecreationразвлечение; хоббиroot cropкорнеплодrotation systemсевооборот	
recreationразвлечение; хоббиroot cropкорнеплодrotation systemсевооборот	
root crop корнеплод rotation system севооборот	
rotation system севооборот	
rye рожь	
services sector сфера обслуживания	
small fruit ягодная культура	
sorghum grain сорго (хлебный злак)	
sugarbeet сахарная свекла	
sugarcane сахарный тростник	
sweet potato батат, сладкий картофель	
syrup очищенная патока	
tallow жир, сало (для свечей, мыла)	
tillage обработка почвы	
tuber клубень	
wheat пшеница	
yield плоды, урожай, сбор урожая	
cattle крупный рогатый скот	
dairy cattle молочный скот	

### VERBS

apply	применять, использовать, употреблять	
cause	послужить причиной/поводом для чего-л.;	
comprise	включать, заключать в себе, содержать	
differ	отличаться	
dominate	преобладать, доминировать	
employ	предоставлять работу; нанимать	
engage	заниматься чем-л., быть занятым чем-л.;	
ensure	гарантировать, обеспечивать	
increase	возрастать, увеличивать(ся)	
involve	включать в себя	
overtake	охватывать	
raise	выращивать (растения); разводить (птицу, скот)	
reduce	понижать, сокращать, уменьшать	
tend toward	склоняться (к чему-л.)	
vary	разниться; отличаться, различаться	

### ADJECTIVES

diversified	различный, разнообразный, мноотраслевой	
entire	полный	
specialized	припособленный к определенным условиям	
widespread	широко распространенный	

### Active Vocabulary (Text B)

### NOUNS

1.30118		
advantage	преимущество, выгода, польза	
care	уход, забота	
corn planter	зерновая сеялка	
culture	1. сельскохозяйственная культура;	
	2. культивирование, возделывание,	
	выращивание	
device	устройство; аппарат; приспособление;	
fuel	топливо, горючее	
engine	двигатель, мотор	
gasoline; (Br.)	бензин	
petrol		
grass	трава	
h.p. = horse power	лошадиная сила; мощность в лошадиных	
	силах	
hoe	мотыга	
implement	машина, орудие; инструмент;	
	мн.ч инвентарь	
plow, (Br. plough)	1. плуг;	
moldboard plow;	2. навесной плуг;	
power	сила, мощность, энергия;	
pump	насос	
steam	пар	
tool	орудие труда, инструмент	
	VEDDG	

### VERBS

advise	советовать, рекомендовать
aid	помогать, оказывать помощь
bind (bound)	вязать, связывать

design	проектировать, конструировать	
develop	1. развивать(ся); совершенствовать;	
	2. выводить (сорт или породу)	
dig (dug)	копать, рыть, выкапывать	
eliminate (weeds)	удалять, уничтожать (сорняки)	
harvest	убирать (собирать) урожай; жать	
improve	1. улучшать, усовершенствовать;	
	2. окультуривать, мелиорировать (почву)	
invent	изобретать	
mount	устанавливать, навешивать	
mow (mowed,	косить; жать	
mown)		
obtain	получать; приобретать	
syn. get, receive		
plow	пахать	
Br. plough		
power	снабжать энергией	
provide with	снабжать; обеспечивать	
seek, (sought)	искать, разыскивать	
thresh	молотить	
till	возделывать, обрабатывать	

### ADJECTIVE

intricate	сложный
versatile	многосторонний, гибкий

#### 2.2. Основные тексты

#### TEXT A

#### AGRICULTURE IN GENERAL

Agriculture is the production of food, feed, fiber and other goods by the systematic growing and harvesting of plants and animals. It is the science of working land and using it to raise plants and animals.

The word agriculture is the English adaptation of Latin agricultūra, from ager, "a field", and cultūra, "cultivation" in the strict sense of "tillage of the soil".

Many different factors influence the kind of agriculture practiced in a particular area. Among these are climate, soil, water availability, topography, nearness to markets, transportation facilities, land costs, and general economic level.

The primary agricultural products consist of crop plants for human food and animal feed and livestock products. The crop plants can be divided into 10 categories: grain crops (wheat, for flour to make bread, many bakery products, and breakfast cereals; rice, for food; maize, for livestock feed, syrup, meal, and oil; sorghum grain, for livestock feed; and oats, barley, and rye, for food and livestock feed); food grain legumes (beans, peas, lima beans, and cowpeas, for food; and peanuts, for food and oil); oil seed crops (soybeans, for oil and high-protein meal; and linseed, for oil and high-protein meal); root and tuber crops (principally potatoes and sweet potatoes); sugar crops (sugarbeets and sugarcane); fiber crops (principally cotton, for fiber to make textiles and for seed to produce oil and high-protein meal); tree and small fruits; nut crops; vegetables; and forages (for support of livestock pastures and range grazing lands and for hay and silage crops). The forages are dominated by a wide range of grasses and legumes, suited to different conditions of soil and climate. In the 2000s, plants have been used to grow biofuels, biopharmaceuticals, bioplastics, and pharmaceuticals. Biofuels include methane from biomass, ethanol, and biodiesel.

Livestock products include cattle, for beef, tallow, and hides; dairy cattle, for milk, butter, cheese, ice cream, and other products; sheep, for mutton (lamb) and wool; pigs, for pork and lard; poultry (chiefly chickens but also turkeys and ducks) for meat and eggs; and horses, primarily for recreation.

The soil is the basis of agriculture. Enough food for all the people can be grown if there is sufficiently good soil for producing high yields. Increasing in the yield of the grain and other crops is ensured by a number of factors. First comes the system of agrotechnical measures. Farmers have to introduce better crop rotation systems. Rotation systems naturally differ in various areas and under various conditions. Second goes the technical equipment of farms. Tractors, combines, lorries and other machinery considerably reduce the time required for agricultural work. At present all the problems in agriculture are involving engineering. Today's farming is highly developed and intensive. Many agricultural processes are being mechanized now. The most modern farm machinery is used for crop cultivation and for livestock breeding. Third goes an increase in delivering chemical fertilizers and the improvement of their quality. Applying organic and chemical fertilizers farmers increase crop yields. The production and use of chemical and biological means of plant protection should be increased.

Modern agronomy, plant breeding, pesticides and fertilizers, and technological improvements have sharply increased yields from cultivation, and at the same time have caused widespread ecological damage and negative human health effects.

#### TEXT B

#### MECHANIZATION OF AGRICULTURE

The earliest efforts of people were to lift themselves from primitive cultures through better tools for tilling and better methods of using the land. At the dawn of agriculture man practiced the most elementary methods of improving soil structure. He broke up the soil and prepared a seedbed using the most primitive cultivating devices, a digging implement like a hoe.

Until the 19<sup>th</sup> century man's tools for tilling the land remained mainly unchanged – a sharpened stick, a simple hoe and a primitive "plow". But people began seeking devices and methods of work that were more efficient. Of greatest significance was the development of mechanical power for farm work.

Wind, water and animals were used to provide energy for various devices. This led to the Industrial Revolution that began in the 18<sup>th</sup> century. The Industrial Revolution began by putting water and steam to work. James Watt, a British engineer, developed a steam engine in 1765. Steam-powered tractors were developed in the mid-1800s, but they were expensive and difficult to operate. The use first of water power and then of steam power stimulated the invention of agricultural machinery replacing manual labor: a threshing machine, a mowing machine, a self-binder, a potato-digger, etc.

In the middle of the 18<sup>th</sup> century farmers tried a moldboard plow

In the middle of the 18<sup>th</sup> century farmers tried a moldboard plow which was designed to eliminate weeds by turning over a thick layer of the soil. The year 1869 saw the appearance of a mechanical corn planter, 1875 – a self-binding reaper. The first combine was designed in 1836.

In 1897 a German engineer Rudolf Diesel invented a new engine known as a diesel which began a transport revolution in cars, lorries, trains and ships. The main advantage of diesels is that they can run on rather cheap fuel. The most far-reaching invention for agriculture was the gasoline engine mounted on a farm tractor at the beginning of the 20<sup>th</sup> century. Today a farmer has a wide range of tractors – gasoline and diesel, with engines varying from 20 h.p. to 400 h.p. Electric power or electricity in its nature is far more versatile than the earlier power sources. Nowadays farmers use electric power to operate electronic and automated equipment. Electric motors are also used to run milking machines, irrigation pumps and many other farm machines.

Modern agriculture is known by its full-scale mechanization of jobs requiring more intricate agricultural machinery, such as harvesting of sugar beets, mowing of grasses, silaging, livestock care, etc.

Today our agricultural enterprises are able to obtain high yields of crops and animal produce because they work in close contact with science. Science and technology help make agriculture more productive in three main ways. They provide farmers with labor-saving technologies, produce improved plant varieties and breeds of livestock and develop new agricultural chemicals.

Many farmers use computers to aid in farm operations. Electronic computers are fine economic advisers. They can supply a farm with advice what tractors and machines are to cultivate the soil or grow good crops, which and how much fertilizer have to be used, etc. Using the Internet farmers may use of data provided by agricultural colleges or other information centers.

#### 2.3. Грамматический минимум

#### **Grammar revision**

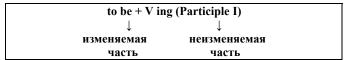
#### Образование и употребление Continuous Tenses Active

Общее значение группы времен Continuous — обозначение действия, соотнесенного с каким-то определенным моментом действия в процессе его развития, т. е. совершающегося (Present Continuous) — настоящее продолженное время); совершающегося (Past Continuous) — прошедшее продолженное время; или которое будет совершаться (Future Continuous) — будущее продолженное время) в определенный момент в настоящем, прошедшем или будущем.

#### Образование:

to be + Participle I Active смыслового глагола

Participle I *Active* образуется при помощи прибавления суффикса - ing к основе смыслового глагола: work – working, write – writing.



Present Continuous	Past Continuous	Future Continuous	
	Positive form		
am is are + V-ing	was + V-ing	shall be + V-ing will be	
I am writing.	I was writing.	I shall /will be writing.	
She is writing.	She was writing.	He will be writing.	
They are writing.	They were writing.	They will be writing.	
	Interrogative form	n	
Is she writing?	Were they writing?	Will he be writing?	
Are they writing?			
	Negative form		
I am not writing.	I was not writing.	I shall not be writing.	
She is not writing.	They were not	He will not be writing.	
They are not writing.	writing.		

**Примечание**: **The Present Continuous** употребляется также для выражения намеченного, запланированного действия, которое совершится в будущем, часто ближайшем:

**Are** you **doing** anything tonight? Ты что-нибудь делаешь

сегодня вечером?

Yes. I'm meeting my friends. Да, я встречаюсь со своими

друзьями

(так запланировано).

Слова, которые чаще всего сопровождают Continuous Tenses.

Present Continuous	Past Continuous	Future Continuous
now (сейчас), at (the) present (moment) (в настоящий момент), at this moment (в данный момент) и т. п.	точное указание времени в прошлом: at 5 o'clock (yesterday) — (вчера в 5 часов), at that moment — (в тот момент), at that time — (в то время), when he came (когда от пришел) и т.п. all day long — (весь день), all the time — (все время), the whole day — (весь день), from 10 till 12 — (с 10 до 12 часов), during — (в течение) и т. п.	точное указание времени в будущем: at that time (tomorrow)— (в это время завтра), at 5 o'clock tomorrow— (в 5 часов завтра), all day tomorrow— (весь день завтра), all the time— (все время), from 6 till 8 (с 6 до 8 часов) и т. п.

**Примечание: Present Continuous,** как правило, *не* **употребляется** с глаголами, выражающими:

- 1) **чувства восприятия**: *to see* видеть; *to hear* слышать; *to notice* замечать; *to smell* пахнуть; *to feel* чувствовать; *to recognize* узнавать; *to listen (to)* слушать; *to watch* наблюдать и др.
- 2) эмоции: to want хотеть; to desire желать; to refuse отказывать; to forgive прощать; to wish желать; to hate ненавидеть; to like нравиться; to love любить и др.
- 3) **мыслительные процессы**: *to understand* понимать; *to know* знать; *to remember* помнить; *to believe* верить; *to expect* ожидать; *to suppose* полагать, предполагать; *to recollect* вспоминать; *to trust* верить и др.

- 4) принадлежность: *to have* иметь; *to own* обладать; *to belong* принадлежать; *to possess* обладать и др.
- 5) с глаголами: to seem казаться; to appear появляться; to contain содержать; to consist состоять; to keep хранить; to concern беспокоиться; to matter значить и др.

#### Употребление Participle I (Active, Passive) в разных функциях

**Причастие I (Participle I)** - это неличная форма глагола, выражающая процесс действия и совмещающая в себе свойства глагола, прилагательного и наречия.

Причастие I (Participle I) имеет форму времени и залога.

Причастие I (Рагпсіріе I) имеет форму времени и залога.		
Форма		
Активный залог	Пассивный залог	
V-ing	being V $_3$	
using	being used	
Употребление:	Употребление:	
<b>а)</b> в позиции	<b>а)</b> в позиции	
прилагательного	прилагательного $(Adj)$ -	
(Adj) - определение.	определение.	
Перевод:	Перевод:	
<ul><li>1) причастием</li></ul>	<ul><li>1) причастием</li></ul>	
настоящего времени с	настоящего времени:	
суффиксами «ущ», «ющ»,	использующийся	
«ащ», «ящ», если глагол-		
сказуемое относится к		
настоящему времени –		
использу <b>ющ</b> ий;		
<ul><li>2) причастием</li></ul>	<ul><li>2) причастием</li></ul>	
прошедшего времени с	прошедшего времени:	
суффиксами «вш», «ш»,	использовавшийся	
если глагол-сказуемое		
относится к прошедшему		
времени - <i>использова<b>вш</b>ий;</i>		
<ul><li>3) придаточным</li></ul>	<ul><li>3) придаточным</li></ul>	
определительным	определительным	
предложением – <i>который</i>	предложением:	
использует; который	который используется;	
использовал;	который использовался	
	(использовали);	
	Форм Активный залог V-ing using  Употребление: а) в позиции прилагательного (Adj) - определение. Перевод: □ 1) причастием настоящего времени с суффиксами «ущ», «ющ», «ащ», «ящ», если глагол- сказуемое относится к настоящему времени — использующий; □ 2) причастием прошедшего времени с суффиксами «вш», «ш», если глагол-сказуемое относится к прошедшему времени - использовавший; □ 3) придаточным определительным предложением — который использует; который	

Значение	Форма	
Причастие I	Активный залог	Пассивный залог
	б) в позиции наречия	б) в позиции наречия
	(Adv) – обстоятельство	(Adv) –
	(времени, причины,	обстоятельство
	условия и т. д.). В этой	(времени, причины,
	функции причастию могут	условия и т. д.).
	предшествовать союзы	Перевод:
	when, while, if, unless,	<ul><li>1) деепричастием -</li></ul>
	once, though, etc.	будучи использован;
	Перевод:	<ul><li>2) придаточным</li></ul>
	<ul><li>1) деепричастием с</li></ul>	предложением
	окончаниями «а», «я», «в»	времени, причины,
	- используя; использовав;	условия и т. д. – когда
	<ul><li>2) придаточным</li></ul>	(его) используют
	предложением времени,	(использовали).
	причины, условия и т. д. –	
	когда используете	
	(использовали).	

# Образование и употребление Gerund (Active, Passive) в разных функциях

Герундий (Gerund) — это неличная форма глагола, выражающая процесс действия и совмещающая в себе свойства глагола и существительного. Поэтому на русский язык герундий переводится существительным, глаголом или деепричастием.

**Образование:** герундий образуется при помощи прибавления суффикса - **ing** к основе глагола, т.е. имеет ту же форму, что и причастие I: **work – working, write – writing.** 

В русском языке соответствующая форма (т. е. герундий) отсутствует.

#### Gerund как и Participle I имеет форму времени и залога:

Значение	Форм	a
Герундий	Активный залог	Пассивный залог
Gerund Indefinite (Simple)	V-ing	being V <sub>3</sub>
выражает действие,		
одновременное	using	being used
с действием сказуемого		

Употребление	Функции
1. в позиции <b>существительного</b> ( <b>N</b> ):	
а) перед глаголом;	a) Reading is my hobby.(подлежащее)
б) после глагола без предлога;	b) I like reading. (прямое дополнение)
	c) I am fond of reading. (предложное
в) после глагола с предлогом;	дополнение)
	d) My hobby is reading. (именная часть
г) в позиции после	сказуемого)
глагола-связки;	2. There are different ways of <i>reading</i> .
2. в позиции прилагательного	(определение). В этой функции
(Adj)	герундию часто предшествует предлог
	"of " – way of «способ», idea of «мысль»,
	chance of «возможность», reason for
	«причина», «основание» и др.
	3. After <i>reading</i> the book he went to bed.
	(обстоятельство).
	В этой функции герундию всегда
	предшествует один из предлогов: after,
3. в позиции наречия (Adv)	before, on, at, in, by, without и др.
Способы перевода	Примеры
1. существительное	1. Reading is useful.
	<i>Чтение</i> – полезно.
2. инфинитив	2. He finished <i>reading</i> this book.
	Он закончил <i>читать</i> эту книгу.
3. деепричастие	3. After <i>reading</i> this book he gave it to me.
	Прочитав эту книгу, он дал ее мне.
	4. I thanked him for giving me this book.
4. придаточное предложение	Я поблагодарил его за то, что он дал
	мне эту книгу.

Герундий, **имея свойства существительного**, может сочетаться с предлогами и определяться притяжательным местоимением или существительным в притяжательном падеже.

She dreams <b>of going</b> abroad.	Она мечтает поехать
	(о поездке) за границу.
We objected to their paying for	Мы были против оплаты
our work in the field.	нашей работы в поле.
They insisted on their students'	Они настаивали, чтобы их
going to the farm.	студенты поехали в хозяйство.
	(Они настаивали на поездке
	их студентов в хозяйство).

Существует ряд глаголов, после которых употребляется только герундий: *to stop* - прекращать, *to finish* - заканчивать, *to avoid* - избегать, *to prevent* - предотвращать, *to delay* - откладывать, *to forgive*- прощать, *to excuse* - извинять, *to mind* - возражать, *to require* - требовать, *to suggest* - предлагать и др.

**HO:** *stop* в значении *прекращать*, *переставать что-либо делать* требует после себя **герундий**:

Stop whistling.

Перестань свистеть.

В значении же *остановиться с какой-либо целью (чтобы что-то сделать)* **stop** употребляется с инфинитивом после него:

He stopped *to speak* to Он остановился, чтобы поговорить Mary. с Мери.

Есть глаголы, после которых можно употреблять как герундий, так и инфинитив в том же значении:

*to begin, to start*- начинать, *to continue* (*to go on*) - продолжать, *to attempt* - пытаться, *to intend* - намереваться, *to love* - любить, *to like* - нравиться, *to hate* - ненавидеть, *to prefer* — предпочитать  $u \partial p$ .

I began working. Я на I began to work. Я на

Я начал работать. Я начал работать.

Герундий часто входит в состав сложных существительных, указывающих назначение предмета: writing table - письменный стол; booking office — билетная касса; swimming pool — плавательный бассейн.

Герундий часто употребляется после глаголов, прилагательных и причастий в функции предложного дополнения и **требующих** после себя определенных предлогов:

*to depend on/upon* – зависеть от; *to insist on* – настаивать на; *to object to* – возражать против; *to think of* – думать о ; *to thank for* – благодарить за; *to prevent from* – препятствовать, мешать; *to be proud of* – гордиться чемлибо, кемлибо); *to be fond of* – любить что-либо; *to be sure of* – быть уверенным в чем-либо; *to be pleased at/with* – быть довольным (кем-либо, чем-либо); *to be surprised at* – удивляться (чему-либо); *to be interested in* – интересоваться (чем-либо); *to be connected with* – быть связанным с u dp.

The farmer *insisted on applying* Фермер настаивал на внесении opгanic fertilizers. Фермер настаивал на внесении opгaнических удобрений.

Сравнительная таблица функций герундия после предлогов и способы перевода

после предлогов и способы перевода		
Герундий в функции		
определение		
Употребляется	Переводится	Примеры
с предлогами	1.существительным	1.The method <i>of</i>
of или for		<i>repairing</i> these parts
после		will be further
существительного		improved.
		Способ (какой?)
		ремонта этих частей
		будет в дальнейшем
		усовершенствован.
	2.инфинитивом	2.The necessity <i>of</i>
		<i>repairing</i> these parts is
		perfectly obvious.
		Необходимость
		(какая?)
		ремонтировать эти
		части совершенно
		очевидна.

Герундий в функции		
	предложное дополнени	ie
Употребляется	Переводится	Примеры
с предлогами	1. инфинитивом (когда	1.We thought of
of, for, in, on, at,	в русском языке глагол	repairing these parts as
to, from, with	требует после себя	soon as possible.
и т.д. после	прямого дополнения)	Мы думали (о чем?)
сказуемого		о том, чтобы
		отремонтировать
		эти части как можно
		скорее.
	2.существительным	2.He is responsible <b>for</b>
		repairing these parts.
		Он отвечает (за что?) за
		ремонт этих частей.
	3. дополнительным	3.He is responsible <b>for</b>
	придаточным	our repairing these
	предложением	parts.
		Он отвечает (за что?) за
		то, чтобы мы
		отремонтировали эти
		части.

# Функции герундия: **Обстоятельство**

	а) времени		
Употребляется	Переводится	Примеры	
с предлогами <b>on</b> ,	1.деепричастием	In repairing these parts	
upon, after,	совершенного вида	he developed great skill.	
before, in	2. существительным	Ремонтируя эти части,	
	3. обстоятельствен-ным	(во время ремонта этих	
	придаточным	частей, когда	
	предложением	он ремонтировал)	
		он проявил большое	
		мастерство.	

# Функции герундия: **Обстоятельство**

	б) образа действи	Я
Употребляется	Переводится	Примеры
с предлогоми	1.деепричастием	He could repair these parts
without, by,	совершенного вида	without using a special
instead of	2. существительным	device.
		Он смог отремонтировать
		эти части, не применяя (без
		применения) специального
		инструмента
		3. You will learn a great
		deal by repairing these
	3. обстоятельственным	parts.
	придаточным	Вы научитесь многому,
	предложением	отремонтировав эти
		части (благодаря тому,
		что отремонтируете,
		путем ремонта).
в) цели		
с предлогом for	1) существительным	We have been sent for
	2) обстоятельственным	repairing these parts.
	придаточным	Нас прислали, чтобы
	предложением	отремонтировать эти
		части (для ремонта)

### Сопоставление причастия І и герундия

Употребление	Gerund	Participle I
1. в позиции		
существительного (N)		
а)перед глаголом	Applying the	
(подлежащее)	necessary fertilizers	
	improves the soil	
	fertility.	
	The best way to	
	solve this problem is	
	experimenting.	

#### Сопоставление причастия I и герундия

Употребление	Gerund	Participle I
б) после глагола связки		
(именная часть	The farmer	
сказуемого)	completed	
	harvesting in time.	
в) после глагола		
(дополнение)		
		The engineer is
2. в позиции глагола (V)		<b>preparing</b> a series of
(часть сказуемого в	The principle of	experiments.
Continuous Tenses)	operating this	701 ' .' .'
	mechanism is	The scientist
	simple.	demonstrated an
3. в позиции	10, 11, 11	operating unit.
прилагательного Adj	After being tested	
(определение)	the tractor was	Tr
	stopped.	Testing the engine
4		the tractor-driver used
4. в позиции наречия		necessary
Adv (обстоятельство)		instruments.

#### Функции герундия и причастия

Функция	Герундий	Причастие
Подлежащее	<b>Driving</b> a car is a profession.	
Сказуемое	His hobby is <b>driving</b> .	He is <b>driving</b> to Minsk now.
Дополнение	He writes articles about driving.	
Определение	His plan of <b>driving</b> to Minsk is not good.	The man <b>driving</b> a car is our chief engineer.
Обстоятельство	Before <b>driving</b> a car one must learn to do it properly.	<b>Driving</b> a car one must be very attentive.

#### 2.4. Задания для самоконтроля

- 1. Скажите, как образуется утвердительная, отрицательная и вопросительная формы глагола-сказуемого:
- a) в настоящем длительном времени в активном залоге (The Present Continuous Tense Active).
- б) в прошедшем длительном времени в активном залоге (The Past Continuous Tense Active).
- в) в будущем длительном времени в активном залоге (The Future Continuous Tense Active Voice).
- 2. Какой из глаголов употреблен в форме Present Continuous Active:
  - a) was driving; b)are driving; c)are driven
- 3. Скажите, в каком из следующих предложений глаголсказуемое стоит в Past Continuous Tense Active Voice.
  - a) Two students translated the text.
  - b) The text was being translated by two students.
  - c) Two students were translating the text.
- 4. Переведите выбранное предложение на русский язык. Какое наречие времени вы можете использовать, чтобы объяснить употребление Past Continuous в данном предложении?
- 5. Переведите следующие предложения. Покажите разницу в русском переводе глаголов в Present Continuous и Present Simple:
  - a) My brother **goes** to school.
  - b) My brother is going to school.
  - 6. Как образуются Participle I, Gerund (Active, Passive)?

- 7. В каком предложении Participle I употреблено в функции обстоятельства? Переведите выбранное предложение на русский язык.
- a) Translating the text the student didn't look up the words in the dictionary.
  - b) The student transtating the text is our monitor.
  - 8. Каким членом предложения может быть герундий?
  - 9. Как переводится герундий на русский язык?
- 10.В каком предложении слово *applying* является герундиемподлежащим и переводится словом *применение*?
  - a) Applying the necessary fertilizers improves the soil fertility.
- b) Applying the necessary fertilizers farmers improve the soil fertility.

### **3.УЧЕБНО-МЕТОДИЧЕСКИЕ МАТЕРИАЛЫ** К ПРАКТИЧЕСКИМ ЗАНЯТИЯМ

#### 3.1. Text-based assignments

#### (ТЕХТ А, изучающее чтение)

Методические указания и рекомендации по работе с текстом.

Задачи, которые читающий решает в процессе изучающего чтения, условно можно разделить на три основные группы:

- 1) восприятие слов и выражений и их точное понимание в тексте;
  - 2) извлечение полной информации, содержащейся в тексте;
  - 3) осмысление извлеченной информации.

**На репродуктивном уровне** студенты должны хорошо уметь читать текст, выполнить перевод текста, находить в тексте слова и словосочетания на английском языке для русских эквивалентов; отвечать на общие вопросы по тексту; выбрать правильный вариант из нескольких предложенных.

**На продуктивном уровне** студенты должны выполнить перевод текста, соблюдая научный стиль; уметь заполнять пробелы подходящими по смыслу лексическими единицами, дать перевод слов и словосочетаний с русского на английский; составить план текста.

**На творческом уровне** студенты должны уметь переводить предложения с русского на английский, используя лексику по теме модуля; пересказывать текст, анализировать, характеризовать понятие сельского хозяйства и механизации сельского хозяйства.

#### LANDUAGE STUDY

(A) Exercise 1.Make sure that you know the English equivalents for the following words and word combinations.

Сельское хозяйство; обработка почвы; ведение животноводческого хозяйства; водообеспеченность; перевозочные средства; предприятия по производству сельхоз продукции; сельское хозяйство, приспособленное к

определенным условиям; многоотраслевое сельское хозяйство; экологический фактор; растение, выращиваемое в пищу; зерновые культуры; сухой завтрак; зернобобовые культуры; масличные культуры; клубнеплоды; корнеплоды; сахароносные культуры; волокнистые культуры; орехоплодные культуры; пастбищная земля; силосные культуры; распространенный во всем мире; воздействие на здоровье человека.

#### (B) Exercise 2. Read the text and find the words that denote.

- Factors influencing the kind of agriculture to choose;
- Food crops
- Feed crops
- Industrial crops
- Livestock products
- Means for increasing yields

### (B) Exercise 3. Find in the text the nouns formed from the following verbs:

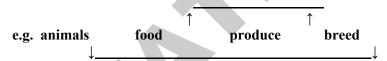
Cultivate, manage, produce, process, vary, fertilize.

### (B) Exercise 4. In paragraphs 1 - 4 find the synonyms to the following words:

Firm, farming, land, special, extensively, fodder, manufacture

#### **(B)** Exercise 5. Match these words with their definitions.

1. agriculture	a. treating raw materials
2. plant	b. living creature which is not a plant
3. animal	c. to provide someone with machinery
4. food	d. a thing which grows in the ground
5. field	e. to manufacture
6. processing	f. something eaten by people and animals or taken
	in by plants
7. to equip	g. use of land for growing crops, raising animals
8. produce	h. a piece of cultivated land



#### Breed animals, produce food

- 1) protection country's plant achievements
- 2) application of rotation fertilizers crop
- 3) meaning production old agricultural
- 4) nutrient yields high substances
- 5) agrotechnical reduce measures the time
- 6) mechanization crop full yields

#### **(B)** Exercise 7. Complete the sentences with the words in the box.

increased; produce; equipment; introduced; achievements; is growing; pig-growing; reduce; equipped; to feed;

- 1. We must ... more food for ourselves and import less.
- 2. The inventor was rewarded by the government for his scientific ....
- 3. Tobacco was ... into Europe from America.
- 4. The ... in his laboratory is useful and modern.
- 5. The farmer is engaged in ....
- 6. Our farm is fully ... with everything to start crop cultivation.
- 7. It's time ... the cattle.
- 8. The farmer ... vegetables in this field.
- 9. While being abroad the students ... their knowledge of English.
- 10. ... your speed! You are driving too fast!

#### (C) Exercise 8. Complete the sentences with English equivalents.

- 1. Сельское хозяйство was the key development that led to the rise of human civilization.
- 2. Depending upon the field of application crops can be subdivided into зерновые, бобовые, масличные, сахароносные crops.

- 3. If the soil is poor farmers have to применять удобрения.
- 4. At present all operations in agriculture могут быть механизированы.
- 5. Development of agricultural techniques has steadily increased сельскохозяйственную производительность.
- 6. Applying fertilizers фермеры увеличивают урожаи сельскохозяйственных культур.
- 7. Being cultivated in many countries эти растения широко распространены.
- 8. Высокие урожаи сельхоз культур are controlled by a number of factors.

#### TEXT STUDY

### (A) Exercise 1. Complete each sentence with an appropriate word. Consult the text A if necessary.

- 1. Wheat is used for ... to make bread, many bakery products, and breakfast cereals.
  - a) grain;
  - b) flour;
  - c) oil;
- 2. Tractors, combines, lorries and other machinery considerably .. the time required for agricultural work.
  - a) reduce;
  - b) differ;
  - c) increase;
- 3. Modern agronomy has caused widespread ... and negative human health effects.
  - a) water availability;
  - b) agricultural productivity;
  - c) ecological damage;
- 4. About ... of the world's workers were employed in agriculture in 2007.
  - a) half;
  - b) one third;
  - c) two-quarters;

- 5. Different farmers use different ... in their work.
- a) rotation systems;
- b) feed crops;
- c) livestocks;

### (A) Exercise 2. Are the following statements true or false? Correct the false ones.

- 1. At present the word 'agriculture' means growing crops.
- 2. Agriculture is based on the soil used by farmers.
- 3. An increase of the agricultural production depends on two factors, namely: the system of agronomic measures and mechanization of farm processes.
- 4. Climate and soil are the main factors influencing the kind of agriculture practiced in a particular area.
  - 5. Livestock breading is the main source of biofuels.

#### (B) Exercise 3. Complete the sentences in A with the best ending in B.

1. The word "agriculture" means	a. branches of agriculture.
2. Agriculture is	b. reduces the time required for agricultural work.
3. There are two main	c. applying fertilizers.
4. The soil is	d. can cause damage to the environment.
5. For improving soil fertility farmers	e. breeding livestock and growing crops.
6. Farm machinery considerably	f. is rather a difficult thing.
7. Farmers increase crop yields	g. into several groups.
8. High application of fertilizers and chemicals	h. introduce crop rotation systems.
9. Crops can be subdivided	i. the basis of agriculture.
10. To choose the necessary feeds for livestock	j. a vital branch of an economy.

### (B) Exercise 4. Give your reasons for the following statements. Read the text A more carefully if you need.

Statements from the text	Why?
1. The soil is the basis of agriculture.	
2. Modern farming is highly developed and intensive.	
3. Application of fertilizers and chemicals must not disturb the biological balance.	
4. Fodder is one of the principle problems of cattle breeding.	
5. All farms have to introduce better crop rotation systems.	

### (B) Exercise 8. Divide the text into several logical parts. Find the key sentences in each part.

#### **DISCUSSION**

#### (A) Exercise 1. Answer the following questions.

- 1. What is agriculture?
- 2. What are the key conditions for increasing agricultural production?
- 3. What branches of agriculture do you know?
- 4. How many groups are crops subdivided into?
- 5. What does livestock breeding comprise?
- 6. What problem does cattle-breeding face?

#### (A) Exercise 2. Answer the question using the chart.

# Problem! Problem! How to increase the yield of crops?

Agriculture, its branches human activity, area of land, food, clothing, shelter, a field, crops, a vital branch, country's achievements, foodstuffs, raw materials, crop growing, livestock breeding	Область применения, средства	Существительные и сочетания с существительными	Глаголы и глагольные сочетания
11	Agriculture, its branches	land, food, clothing, shelter, a field, crops, a vital branch, country's achievements, foodstuffs, raw materials, crop growing, livestock	breed, to determine, to develop, to supply (provide) smb. (smth)

Область применения, средства	Существительные и сочетания с существительными	Глаголы и глагольные сочетания
Crop growing	food crops, feed crops,	to depend (upon), to be
	industrial crops,	subdivided into
	vegetables, fruits	
Livestock breeding	cattle-breeding, pig-	to comprise, to face, to
	growing, poultry-	choose,
	breeding, fodder, rich	
	enough in protein,	
	nutrient substances	
Agrotechnical measures,	soil, high yields,	to grow, to increase, to
chemicals, chemical	various, crop rotation	ensure, to introduce, to
fertilizers	systems, organic	differ, to deliver, to
	fertilizers,	apply, to disturb, to cause
	improvement, quality,	
	means of plant	
	protection, high	
	application, improper,	
	dangerous, damage,	
	environment	
Technical equipment of	farm machinery,	to reduce, to involve, to
farms	tractors, lorries,	be mechanized,
	engineering, highly	
	developed, intensive,	
	crop cultivation	

### (B) Exercise 3. Complete the chart below and speak about problems touched upon in the text A. You may use your chart if you need.

I agriculture
Food stuffs ---

II

Increasing in the yield of crops and animal produce

increasing in the yield of crops and animal produce		
system of agrotechnical		intensification factors
measures		
crop rotation system	tractors,	chemical fertilizers,
	combines, lorries ,etc.	chemical and biological
		means of

III
environment

- (A) Exercise 4. At the students' conference you are to make a report about factors increasing crop yields. What are you going to speak about?
- (B), (C) Exercise 5. Imagine you are a head of an agricultural enterprise. Your farm specializes in crop growing. What agrotechnical methods and measures do you have to use to increase yields of grain and other crops?
- (B), (C) Exercise 6. Imagine you are a chief engineer of an agricultural enterprise. Your farm specializes in livestock breeding. What agrotechnical methods and measures do you have to use to obtain high yields of animal produce? Which is one of the principle problems cattle-breeding faces nowadays?

#### 3.2. Text-based assignments

#### (ТЕХТ В, изучающее чтение)

# (A) Exercise 1. Guess the meanings of the following international words and phrases.

Значения выделенных слов уточните по словарю (это так называемые «ложные друзья переводчика»). Найдите предложения с данными словами в тексте, проверьте правильность найденных вами значений. Выберите те значения, которые соответствуют контексту.

Lift (v), primitive (adj.), cultures (n), methods (n), practice (v), elementary (adj.), structure (n), cultivate (v), efficient (adj.), mechanical (adj.), mechanization (n), energy (n), industrial (adj.), revolution (n), engineer (n), diesel (n, adj.), transport (n), electric (adj.), motors (n), irrigation (n), pump (n), machine (n), machinery (n), modern (adj.), produce (v), productive (adj.), contact (n), technology (n), chemicals (n), economic (adj.), data (n), colleges (n), information (n), centers (n), design (v).

### (B) Exercise 2. Match the word in A and its synonym in B. Some words in B are odd.

A	В
1. lift;	a. importance;
2. primitive;	b. work;
3. land;	c. raise;
4. till;	d. remove;
5. remain;	e. row;
6. main;	f. expensive;
7. eliminate;	g. simple;
8. significance;	h. chief;
9. operate;	i. stay;
10.range	j. soil;
	k. plow;
	1. attempt
	m. develop;

#### (B) Exercise 3. Fill in the gaps with the correct prepositions.

- 1. The development of mechanical power for farm work led ... the Industrial Revolution.
  - 2. Diesels can run ... rather cheap fuel.
  - 3. The gasoline engine was mounted ... a tractor.
  - 4. Farm tractors vary ... 20 h.p. ... 400 h.p.
- 5. Machine-building plants provide farmers ... modern agricultural machinery.

### (B) Exercise 4. Match the words in the box with their definitions. One definition is odd.

1. primitive;	a) to make or become different;	
2. implement;	b) gas or vapor into which boiling water	
	changes;	
3. change;	c) to cultivate land;	
4. eliminate;	d) having undergone little development;	
5. weed;	e) to cut (grain), to gather in a crop of grain	
	from a field;	

6. reap;	f) to make greater efforts;
7. steam;	g) tool or instrument for working smth.;
8. stimulate;	h) done with the hands;
9. manual;	i) to take or put away;
10.till;	j) wild plant growing where it is not wanted;
	k) bed of fine soil in which to sow;

#### (B) Exercise 5. Complete the sentences with the words in the box.

mainly; plows; invented; aid; advantages; culture; providing; running; dig; develop

- 1. The farmer has five hectares devoted to potato .....
- 2. It is difficult to ... the ground when it is frozen hard.
- 3. We must ... the natural resources of our country, make the minerals, forests, etc., available for use.
- 4. The segment of agricultural industry ... machines, chemicals equipment requires a great number of agricultural engineers.
  - 5. The people who came were ... country visitors.
  - 6. In modern practice plowing is being done by various .....
  - 7. The ... of good education are great.
  - 8. Don't leave the engine of your car ....
  - 9. When was the steam engine ...?
  - 10. He came to my ..., came to help me.

## (C) Exercise 6. Match the word in A and its definition in B. One definition is odd. Write English equivalents for the Russian words in A.

A	В	
трава	dealing with the simplest stages of smth.; easy	
range	make or become different; change; be different	
vary	break up soil and move it; make a hole or tunnel by	
	moving soil	
intricate	the limits between which things exist or are	
	available; an extend	
косить	use a tool, a machine to divide into small pieces or	
	parts	

A B

break up	smth made, invented or adapted for a particular	
	purpose	
device	implement for cutting and turning up the soil,	
	drawn by a tractor	
копать	requiring effort, strength, skill or ability	
invent	cut (grass, etc.) with a machine	
плуг	a plant with green blades and stalks that are eaten	
	by animals create or design smth. not existing	

# (C) Exercise 7. Write every word of the sentences separately. Use capital letters and punctuation marks if necessary.

- 1. Jameswattwasinterestedinmakingexperimentalmodelofsteamengines.
- 2. Manyyearsagomanusedthemostprimitivecultivatingdevices.
- 3. moreintricateagriculturalmachineryhelpsfarmersintheirwork.
- 4. electricpowerstimulatedtheinventionoffarmmachineryreplacingma nuallabor.
- $5.\ a threshing machine was driven by water or winds or sometimes by horsel aborand later by steam.$

#### **TEXT STUDY**

# (A) Exercise 1. Look through the text. Find the English equivalents for the following phrases reflecting realities in agriculture.

Лучшие методы использования земли; рыхлить землю; разработка механической энергии для сельскохозяйственных работ; опробовали навесной плуг; основное преимущество дизельных двигателей; работать на довольно дешевом топливе; сложная сельскохозяйственная техника; сельскохозяйственные предприятия; трудосберегающие технологии; улучшенные сорта растений; улучшенные породы животных; хорошие помощники в экономических вопросах.

## (A) Exercise 2. Read the text again more carefully. Complete each sentence with the appropriate word: a, b, c.

- 1. Some centuries ago people used the most ... methods for tilling the land.
  - a) efficient
  - b) primitive
  - c) stimulated
- 2. The changes in industry and then in agriculture started by putting ... to work.
  - a) a digging implement like a hoe
  - b) wind and animals
  - c) water and steam
  - 3. ... began a transport revolution.
  - a) a moldboard plow
  - b) a diesel
  - c) steam-powered tractors
  - 4. At present a lot of farm jobs require modern ... farm machinery.
  - a) unchanged
  - b) provided
  - c) intricate
  - 5. Today farmers are able ... of crops and meat and milk produce.
  - a) to develop new agricultural chemicals
  - b) to get high yields
  - c) to stimulate manual labor

# (B) Exercise 3. Read the following statements and ask your groupmates to define whether the statements are true or false and correct the false ones.

In their answers your groupmates should use the conversational expressions:

That's right!
I'm afraid you are wrong.
I quite agree with you.

I don't think so.
I believe (suppose) ...
In my opinion ...

1. From the ancient time Man tried to use better devices for cultivating the soil.

- 2. The Industrial Revolution began by putting wind to work.
- 3. In the 20<sup>th</sup> century farmers tested a moldboard plow.
- 4. At present a farmer has different types of tractors at his disposal.
- 5. Today agriculture is able to provide people with enough foodstuffs.

### (B) Exercise 4. Match the columns. Complete the chart with the necessary information from the text.

1. Primitive cultivating devices:	steam powered
THE TAXABLE OF THE PARTY OF THE	tractors,
2. Inventors and their inventions:	gasoline and diesel
2. Inventors and their inventions.	tractors
3. Agricultural machinery in the 18 <sup>th</sup> century:	plowing,
4. Agricultural machinery in the 20 <sup>th</sup> century:	James Watt
1. Agricultural machinery in the 20 century.	developed
5. Farm gobs:	a hoe, digging
o. rum goos.	implements,

### (B) Exercise 5. Complete the chart below with the necessary information from the text.

Inventors	Inventions	The result
James Watt		
Rudolf Diesel		

#### (B) Exercise 6. Match the parts of the sentences.

	provides farmers with labor-saving				
1. Thousand years ago people	technologies, improved crop varieties and				
	breeds of livestock, up-to-date chemicals.				
2. The Industrial Revolution	farm specialists with advice how to do				
2. The madstrar revolution	various farmers' gobs.				
3. Science	are now beginning to make more and more				
3. Science	use of electronic devices.				
4. The invention of diesels	used the most primitive devices and methods				
4. The invention of diesers	for tilling and cultivating the land.				
5. But steam-powered tractors	is that they can run on rather cheap fuel.				

6. Computers supply	began by using water- and then steam power for jobs in industry and agriculture.			
7. Farmers	is able to obtain high yields of crops and livestock produce.			
8. The most significant advantage of diesels	led to transport revolution.			
9. Nowadays our agriculture	mechanical power was of the greatest significance for mankind.			
10.The development of	cost much and were difficult to operate.			

### (A), (B), (C) Exercise 7. Comment on the following statements. Give reasons for your opinions.

### (A) - 1 sentence for one statement); (B) - 2 sentences); (C) - 3-4 sentences).

Statements	Why?
People began seeking more efficient devices and methods of work.	
2. With a new engine known as a diesel a transport revolution began.	
3. Modern agriculture is highly mechanized.	
4. Today our agricultural enterprises are able to obtain high yields of crops and animal produce.	
5. Many farmers use computers and the Internet.	<b></b>

#### **DISCUSSION**

### (A) Exercise 1. What do these dates in the text refer to?

- $\Box$  at the beginning of the 20<sup>th</sup> century.
- $\Box$  until the 19<sup>th</sup> century.
- □ in 1897.
- $\Box$  in the 18<sup>th</sup> century.
- □ in 1836.

### (В) Exercise 2. Speak about historical milestones (вехи) in engineering development. Use the chart below.

Time	Inventor	Invention	What was new for agriculture?	Result
1765	1765 Watt		Machinery and devices replacing manual labor	Industrial Revolution
1897	Diesel	a diesel	An engine mounted on a farm tractor	Transport Revolution

(B) Exercise 3. How do science and technology help farmers obtain high yields of agricultural produce? Use the chart below.

I

	Science a					
labor-saving technologies	1	improved livestock	breeds	of	new chem	agricultural icals

II

			Results	s			
replace manual	g	ive high yields	give	more	anir	nal	protect
labor			produc	e			plants

- (A) Exercise 4. Speak about "The history of farm mechanization" (6-8 развернутых предложений).
- (B) Exercise 5. What type of power was of the greatest significance for mankind? Give reasons for your opinion (8-10 развернутых предложений).

### (C) Exercise 6. a) Complete the chart below; b) Speak about historical milestones in engineering development.

Time	Inventor	Invention	What is new for agriculture?	Result
2011				

(C) Exercise 7. What major scientific advances in agriculture are going to take place in your lifetime? Describe them and explain why they are going to happen.

#### 3.3. Grammar revision

#### Образование и употребление Continuous Tenses Active

# (A) Exercise 1. a) Match each sentence with its tense. b) Make these sentences negative. c) Make these sentences into questions. Remember the word order for making questions.

1. Nick was translating the article the whole	Present
evening yesterday.	Continuous
2. The student is preparing an agricultural report at	Future
the moment.	Continuous
3. We are planting trees near our hostel now.	Past
3. We are planting trees hear our hoster now.	Continuous
4. The students were having agricultural practice	Past
in the Botanical Garden at 3 o'clock yesterday.	Continuous
5. The students will be taking their exam at 8	Present
o'clock a.m.	Continuous

- (A) Exercise 2. Find in the text A the sentences with Continuous Tenses and translate them.
- (A) Exercise 3. What is the difference in meaning between the following pairs of sentences?
  - 1. Alec and Mary are Scottish. They **come** from Glasgow.
  - 2. They'll be here very soon. They are coming by car.

- 1. He **listened** to the news on the radio when the phone rang.
- 2. He was listening to the news on the radio when the phone rang.
- 1. I was reading a book during the flight.
- 2. I watched a film during the flight.

### (A) Exercise 4. Respond to the following statements using Continuous Tenses and "still".

### Model: a) - I know he was working on his report the whole last week.

#### - He is still working on it.

- 1. I know he was teaching technology of metals when you graduated from the University.
- 2. I know this plant was producing a new model of lorries when you began to work there.
  - 3. I know they are demonstrating a new model of a tractor now.
  - 4. I know farmers were mechanizing this process.
- 5. I know the farmer was delivering raw materials to the plant (завод) when you worked with him.

### (A) Exercise 5. Choose adverbial modifiers of time suitable for Continuous Tenses.

- 1. We were not watching TV ... he was preparing for his exams. (while, nowadays, sometimes, ago).
- 2. Is a farmer growing vegetables on this field ... ? (every year, at present, from morning till night, last year).
- 3. ... we came to the farm they were feeding poultry. (from 5 till 6 p.m., when, tomorrow, while).
- 4. Prof. Smirnov will be giving a lecture on physics ... (next Thursday, at 10 a.m. next Thursday, tomorrow, next month).
  - 5. Was he feeding the cattle ... ? (while, still, ago, when you came)

# (A) Exercise 6. Ask again about the action and give a negative answer. Remember the word order for making questions.

Active: Model a) When I came to the farm our scientists were testing a new model of a combine

- Were your scientists testing a new model of a combine when you came to the farm?
- Our scientists **were not testing** a new model of a combine when I came to the farm.
- 1. They were designing the new equipment when we visited their laboratory.
  - 2. Our teachers are discussing this problem now.
  - 3. She will be working on our farm from 9 till 11 a.m.
- 4. We were preparing for a difficult experiment the whole day yesterday.
- 5. The farmers were applying organic fertilizers when the students arrived at the farm.

#### (A) Exercise 7. Make the sentences.

- 1. The farmer (plough) his fields (every day, last spring, when the rain started).
  - 2. Agronomists (improve) crop quality and yields.
- 3 Soil scientists (make) soil tests (from 9 till 11 yesterday, today, already).
  - 4. The farmer (eliminate) weeds (2 days ago, all day tomorrow, in a week).
- 5. Engineers (design) a new model of a plow (by the New Year, in a week, today).

### (A) Exercise 8. Ten of the verbs in the box are *not usually* used in Continuous form. Choose them.

design; understand; see (видеть); grow; consist; want; remember; use; know; believe; plow; discuss; belong; till; provide; have; turn over; suppose; make

#### (A) Exercise 9. Put the verbs in brackets in the correct tense.

1. Right now the tractor-drivers (are plowing; plow; will be plowing) the field near the village.

- 2. Fertilizers (are having; have; were having) a great effect on crop yields.
- 3. The students (have been discussing; were discussing; discussed) the problem of cultivating the soil at 7 p.m. yesterday.
- 4. They (see; will see; will be seeing) the results of farm mechanization in a year.
- 5. This intricate agricultural machinery (not belong; doesn't belong; isn't belonging) to our farm now.

### (B) Exercise 10. Make sentences from the chart. Translate your sentences into Russian.

The students	am			testing new motors	after the classes at the canteen.
Every agricultural college	are	still		improving potato varieties	nowadays.
Those engineers	is		be	answering the questions	the whole day yesterday.
Ι	will			waiting for you	when the dean comes into the lecture-room.
Belarusian scientists	were			cooperating with some leading farms	at that time.

### (B) Exercise 11. Put the verbs in brackets in the correct tense Simple or Continuous.

- 1. "Where (be) Peter?" -- "He (have) his English lesson" -- "... he always (have) it at this time?" -- "Twice a week".
- 2. Mike (speak, not) Spanish. He (know) Polish. Polish (to speak) in his family when he was a child.
  - 3. Don't come into the classroom! The students (write) a test here.
- 4. When the student came into the classroom his groupmates (write) the dictation there.

- 5. "What ... the farmer (do)? " "He (plow). The farmer (plow) for ten twelve hours every day in spring".
- 6. Nowadays the tractor industry (make) progress in all types of farm machinery

### (B)Exercise 12. Put the verbs in brackets in the correct tense Simple or Continuous.

- 1. Our engineers usually (work) hard. Look at these two men they (work) at a new problem.
  - 2. They (design) this instrument for laboratory research last year.
- 3. Tomorrow at 8 in the morning the farmer (till) this field with a new moldboard plow.
- 4. These two engineers (mount) a new electronic system in our laboratory.
  - 5. The volume of scientific information (grow) very rapidly now.

#### (B) Exercise 13. Put the verbs in brackets in the correct tense.

- 1. When we (enter) the room the commission (discuss) numerous questions.
  - 2. At present our farm (supply) these shops with fresh vegetables.
  - 3. At the end of May the students (prepare) for their examinations.
  - 4. Our engineers (test) new equipment now.
- 5. Nearly a century and a half ago, a Danish physicist, Oersted, (demonstrate) current electricity to a class, using a copper wire.
- (B) Exercise 14. Fill in the gaps with a correct form of the verb in the box. Use each verb only once. There are more verbs than you need.

#### eliminate; use; invent; make; be; try;

- 1. Researchers ... to develop new systems of improving soil fertility.
- 2. The scientists ... attempts to improve the means of breeding cattle.
- 3. Physics ... the science studying various phenomena in nature.
- 4. Our Farmers ... new devices for tilling the soil now.
- 5. Scientists all over the world ... new effective implements for crop growing.

# (B) Exercise 15. Put the words in the correct order to make sentences and then make your sentences into questions. Remember the word order for making questions.

- 1. Were; farmers; discussing; at; questions; the conference; numerous.
  - 2. Engine; university; now; testing; professor; a new; is; our.
- 3. The students; the end; will; May; of; their examinations; be; for; preparing; at.
  - 4. On; safety system; installing; a totally; we; new; are; this farm.
- 5. At; were; organic; the; arrived; when; applying; the; students; the; farmers; fertilizers; farm.

### (C) Exercise 16. There is a mistake in each of the following sentences. Find and correct them.

-	
	1. When I <u>entered</u> the room the <u>students</u> <u>is listening</u>
	1 2 3
	to the lecturer with great attention.
	4
	2. Our <u>engineers will</u> be <u>made</u> the experiment at two
	1 2 3
	o'clock tomorrow.
	4
	3. Some years ago farmers are using modern farm
	1 2
	machinery for crop cultivation and for livestock breeding.
	3 4
	4. At present our scientists are worked out a system of
	1 2
	measures for plant protection.

5. The farmer were <u>feeding</u> pigs at 7 p.m. <u>yesterday</u>?

- (C) Exercise 17. Put the words in the correct order to make sentences. Remember the word order for making questions (sent. 3 and 4).
- 1. a new farm; in our village; I; were still; from; building; when; my holiday; came; they.
- **2.** mechanization; the moment; of; the problem; are; the scientists; discussing; at; farm.
- 3. machinery; is; the economic; due to; increasing; of agriculture; efficiency; farm; using; (?)
- 4. present; developing; branches; two; at; agriculture; are; main; of; the scientists (?)
- 5. the students; crops; the farm; working; farmers; the rain; on; were; when; and helping; started; harvest.

#### (C) Exercise 18. Fill in the gaps with a correct form of the verb.

1. The review of new processes in agriculture ... that a new crop growing technology ... rapidly. 2. Increasing in the yield of crops ... by the proper use of chemical fertilizers. 3. The factory we ... about is one of the cleanest in the country. 4. The changes in agrotechnical measures which ... at present are not only quantitative but also qualitative. 5. At that time the production of lorries was badly required as the country ... industrialization and mechanization of agriculture. 6. The problem of farm mechanization ... by our engineers at the moment.

#### (C) Exercise 25. Translate from Russian into English.

1. В этом году фермер разводит коров. 2. В этом хозяйстве фермеры выращивают корм богатый протеином. 3. Когда мы приехали в передовое хозяйство, мы увидели, что там фермеры использовали современные сельскохозяйственные машины. 4. Я не понимаю, почему он не применяет севооборот. 5. Этой весной фермеры будут вносить минеральные удобрения.

#### Participle I (образование и употребление в разных функциях)

#### Model: to grow

	Active	Passive
Simple (Indefinite) Participle I	growing	being grown

- (A) Exercise 1. Form the Participles I (active and passive) from the verbs in the boxes and translate them:
  - a) in the function of an attribute  $[\partial^I tribju:t]$

**Model:** to produce – 1) **producing** – производящий, производивший; 2) **being produced** – производящийся, производившийся;

b) in the function of an adverbial modifier:

Model: to produce – producing – производя;

(when, while, if) being produced — когда, если их (машины и т. д.) производят (производили)

I)

to cultivate, to grow, to breed, to determine, to supply, to develop, to increase, to introduce, to reduce

II)

to involve, to use, to deliver, to improve, to apply, to disturb, to depend, to comprise, to choose

(A) Exercise 2. Identify the Participle I (active, passive) or the Participle II and translate the sentences. Remember the functions of the Participles. You may use the chart below if you need.

### Сопоставление перевода причастий (Participle I и Participle II) в функции определения и обстоятельства

Participle I	Participle II	
функция определения (attribute)		
A lot of students from <b>developing</b>	Some poor countries get help	
countries (из развивающихся стран)	from <b>developed</b> countries	
study in our capital.	(из развитых стран).	
An electric car developing	The method <b>developed</b>	
(развивающий) the speed of	(разработанный метод)	
150 km/h is being designed.	provided good results.	
The device being developed		
(разрабатываемый, который		
разрабатывается) will be tested at		
the plant.		
функция обстоятельства (adverbial modifier)		
(When, while) developing	(When, if) developed	
(Разрабатывая, когда Белл	(Когда (если) будут	
разрабатывал) transmitter for deaf	разработаны) these devices	
people Bell invented the telephone.	may be very useful for	
Being developed (Когда будет	agriculture.	
разработан), a new supercomputer		
will be very powerful.		

- 1. Look at the smiling girl, isn't she happy?
- 2. The continent discovered by Cook was called Australia.
- 3. Not knowing his new address I could not send him a letter.
- 4. The vegetables being bought in the market are very fresh.
- 5. In Britain most state schools are comprehensive schools offering a general education to all children.
  - 6. The farmer answered all the questions asked by foreign guests.
- (A) Exercise 3. Identify the Participle in the following sentences, state its function and translate the sentences.
  - 1. At present two main branches of agriculture are developing.
- 2. Tractors, combines, lorries and other machinery will considerably reduce the time required for agricultural work.

- 3. Many agricultural processes are being mechanized now.
- 4. Applying organic and chemical fertilizers farmers increase crop yields.
- 5. Depending upon the field of application crops can be subdivided into food crops, feed crops, industrial crops, vegetables and fruits.

### (A) Exercise 4. Identify the Participle I. Translate examples from the text B.

Man prepared a seedbed using the most primitive cultivating devices; agricultural machinery replacing manual labor; with engines varying from 20 h.p. to 400 h.p.; jobs requiring more intricate agricultural machinery; using the Internet; the most far reaching inventions.

### (A) Exercise 5. Choose the correct form of the Participles in brackets.

- 1. The book (taken, taking) from the library contained much interesting material for my report.
- 2. In Britain there are grammar schools, (being provided, providing) a more academic education.
- 3. There are technical schools, (offering, being offered) a combination of academic and technical teaching.
- 4. (being applied, applying) organic fertilizers farmers improve soil fertility.
- 5. (working, being worked) at this problem they had to look through a lot of English journals.
  - 6. The crops (being shown, showing) are used for crop rotation.

# (B) Exercise 6. Group the sentences according to the functions of the Participle I. Translate the sentences.

- 1. The farmer was demonstrating an operating combine harvester.
- 2. Designing new systems we can use electronic computers.
- 3. When finishing the experiment the engineer used a series of new tests.
- 4. A barometer is an instrument measuring atmospheric pressure.
- 5. Making experiments scientists prove that electricity has an atomic character.

- 6. Grasses (травы) grow very well all the year round providing fresh fodder for cattle.
- 7. We are reading about the factors increasing the productivity of the farm animals.

### (B) Exercise 7. Open the brackets and use the correct active or passive Participle I of the verb.

- 1. The house (build) at the corner of the street will be a library.
- 2. While (translate) the text, I consulted a dictionary.
- 3. (Be) very busy he couldn't take part in this work.
- 4. He sat at the table (read) a book.
- 5. Sugar beet is the plant (grow) in many countries.
- 6. (Do) heavy work, the horse needs proper feed.
- 7. While (cross) the field I saw many peasants (work) in the field.

### (B) Exercise 8. Open the brackets and use the correct active or passive Participle I of the verb.

- 1. Now computer technologies mean that engineering employers are (look for) people with a wider range of skills and personalities.
  - 2. Milk is a complete food (contain) all necessary food substances.
- 3. (Specialize) in milk and meat production republic grows potatoes, sugar-beet and other vegetables.
  - 4. Soil is a natural resource (support) plant life.
  - 5. Wheeled tractors (use) for farm work have the great advantage.
- 6. Sunlight is very important for many processes (take place) in the (grow) plant.

### (B) Exercise 9. Paraphrase the sentences using Participles instead of clauses in italics.

- 1. The students who work hard at their English know the language well.
- 2. As these plants are used for different purposes they are cultivated in many countries.
- 3. When the students worked on the farm in autumn they helped farmers harvest crops.

- 4. The book that was being written by him will soon be published.
- 5. *If the soil is poor* it must be fertilized.

### (C) Exercise 10. Fill in the gaps with a correct Participle I of the verb in the box.

#### depend, use (2), have, make (2), carry

- 1 ... areas of land people produce food, clothing, shelter and other useful materials.
- 2. ... experiments scientists prove that electricity has an atomic character.
- 3. A neutron is a particle ... the same mass as a proton but ... no electrical charge.
  - 4. What do you think of the method ...?
- 5. The duration of the study may be from 4 to 7 years, ... upon the program.
- 6. There are only a few of the attempts now ... to improve the methods of teaching adult students.

### (C) Exercise 11. Fill in the gaps with a correct Participle II or Participle I Passive of the verb in brackets.

- 1. a) I cannot forget the story ... by him. b) They listened breathlessly to the story ... by the old man. (to tell).
- 2. a) One can't fail to notice the progress ... by our group during the last term. b) There are only a few of the attempts now ... to improve the methods of teaching adult students. (to make).
- 3. a) We could hear the noise of furniture ... upstairs. b) For a moment they sat silent ... by the story. (to move).
- 4. a) The monument .. on this square has been recently unveiled. b) The monument ... on this square will be soon unveiled. (to erect).

#### (C) Exercise 12. Give the English equivalents. Use the Participle I.

- 1. приемы, улучшающие почву;
- 2. сельскохозяйственная техника, которая используется;

- 3. фермер, знающий агротехнические правила;
- 4. продукты питания, которые производятся;
- 5. удобрения, которые применяют;
- 6. хозяйства, внедряющие севооборот;
- 7. развивающаяся отрасль;
- 8. процессы, которые механизируют;
- 9. крупный рогатый скот, который выращивают;
- 10. техника, сокращающая время;

#### Gerund (образование и употребление в разных функциях)

(A) Exercise 1. Form the Gerund from the verbs in the box and translate it in different functions.

**Model:** to produce – **producing** 

- а) производство (Remember to use prepositions before the Gerund: in при; on,upon по, после, при; by путем, посредством, при помощи; without без).
  - **b)** производя; **c)** производить.

to grow, to develop, to breed, to increase, to introduce, to deliver, to apply, to till, to use, to turn

- (A) Exercise 2. Identify the Gerund (active). Translate the sentences. Remember the functions of the Gerund.
  - 1. Sleeping after meals is bad for health.
  - 2. The farmer likes breeding poultry.
  - 3. Thank you for your delivering new equipment.
  - 4. After supplying foodstuffs the manager left the shop.
  - 5. On seeing the engine in operation the mechanic decided to test it.
- (A) Exercise 3. Identify the Gerund (passive). Translate the sentences. Remember the functions of the Gerund.
- 1. In spite of being developed this branch of economy didn't give good results.
- 2. Without being cultivated well the field produces low yields of wheat.

- 3. After being highly mechanized the farm doesn't face any problems of fodder.
  - 4. Instead of being improved the equipment was tested on the farm.
  - 5. The agronomist insisted on his method being used.
  - 6. My parents enjoy being invited to their friend's home for dinner.

### (A) Exercise 4. Identify the Gerund in the following sentences, state its function and translate the sentences.

- 1. Now the word "agriculture" also means the use of land for breeding animals.
- 2. Enough food for all the people can be grown if there is sufficient good soil for producing high yields.
- 3. Increasing in the yield of the grain and other crops is ensured by a number of factors.
  - 4. Today's farming is highly developed and intensive.
- 5. Livestock breeding comprises cattle-breeding, pig-growing, poultry breeding, etc.

### (A) Exercise 5. Identify the Gerund. Translate parts of the sentences from the text B.

#### a) Gerund as a part of a compound noun:

cultivating devices; a digging implement; a self-binding reaper; a threshing-machine; a mowing-machine; milking machines.

#### b) Gerund in the position of a noun:

methods of improving soil structure; methods of using lands; tools for tilling; by turning over a thick layer of the soil; by putting water to work; harvesting of sugar-beets; silaging; mowing of grasses.

#### (A) Exercise 6. Fill in necessary prepositions.

- 1. The students are interested ... (at, in, with, of) designing various devices.
- 2. The farmer is very fond ... (on, of, in, from) introducing a new crop rotation system.

- 3. I don't say I'm proud ... (with, at, of, in) practicing these methods of improving soil structure.
- 4. Rainy weather can prevented us ... (from, with, at, of) mowing grasses.
- 5. We were surprised ... (in, at, of, with) his being invited to the scientific conference.

### (B) Exercise 7. Match the parts of the sentences in A and B columns.

A	В
1. It's difficult to keep them	grazing on the meadow.
2. The police caught him	coming from the house.
3. Will you please stop	opening the safe.
4. I can't hear someone	thinking about the problem.
5. They left us	working all the time.
6. I could smell smoke	shouting in the distance.
7. The farmer found the horse	changing TV channels.

## (B) Exercise 8. Open the brackets and use the correct active or passive forms of the Gerund and translate the sentences.

- 1. There is no hope of our (supply) the factory with raw materials.
- 2. The farmer breeds pigs without (choose) necessary feeds.
- 3. (Use) chemical fertilizers increases agricultural production.
- 4. People began (grow) plants many thousand years ago.
- 5. Kate likes (give) orders, but she hates (tell) what to do.

#### (B) Exercise 9. Make a sentence out of 2 parts. Use the Gerund.

1. The farmer began	our shop with foodstuffs. (supply)
2. There was little chance of	grain crops. (grow)
3. I don't like the idea of	new farm equipment. (use)
4. The engineer thanked them for	animals. (breed)
5. The manager was surprised at	chemical fertilizers. (deliver)

### (C) Exercise 10. Complete the sentences in A with their English equivalents in B.

A	В
1. Good farming depends on	обеспечение населения всей страны продовольствием.
2. Agriculture looks forward to	внесение минеральных удобрений.
3. The farmers insisted on	использование современной техники.
4. The engineer was interested in	сокращении времени, необходимого для доставки удобрений.
5. The agronomist thanked the farmer for	внедрение севооборота.

### (C) Exercise 11. Translate the sentences from Russian into English using the Gerund.

1. Я не мог избежать разговора с ней. 2. Я ужасно не люблю тратить время зря. 3. Он избегал выражать свое мнение. 4. Он приехал сюда с целью помочь вам убрать урожай. 5. Его обвинили в использовании опасных химикатов. 6. Он вспахивает поле без остановки целый день. 7. Фермер был занят внесением удобрений.

#### Употребление Participle I и Gerund

# (A) Exercise 1. Form the Gerund or the Participle I (active, passive) in the following sentences, state its function and translate the sentences.

- 1. (protecting, being protected) the environment from pollution is the most important task today.
  - 2. It's no use (growing, being grown) grain crops in this field.
  - 3. They insisted on the equipment (using, being used) immediately.
- 4. The farmer made a good progress in (producing, being produced) agricultural products.
- 5. (supplying, being supplied) agriculture with high-quality machinery we can greatly increase its economic efficiency.

### (B) Exercise 2. Translate the sentences. Remember the functions of *ing-forms*.

- 1. Automatic systems designing new machines help the designing engineer to solve many difficult problems. Designing includes a number of criteria. Designing new machines the designer has to solve various engineering problems.
- 2. The industry producing all types of machines and mechanisms is called machine building. Producing new generations of machines and equipment increases productivity. Producing new generations of machines and equipment experts find ways for the application of advanced technologies.

### (B) Exercise 3. Fill in the gaps with correct *ing-forms* of the verbs in the box. Use each verb only once. There are more verbs than you need.

permit; be; practice; contain; send; till; design; thresh

- 1. Fertilizers ... potassium are obtained from potassium rock salts.
- 2. These operations can be practiced with row-crops which are sown with interrows ... cultivation.
  - 3. In spite of ... tired the farmer continued ... the field.
  - 4. Her ... on business to Holland is quite unexpected to them.
  - 5. It is impossible to discuss a crop rotation system without ... it.

### (C) Exercise 4. Open the brackets and use the correct active or passive *ing-forms* of the verbs and translate the sentences.

- 1. The topics for the research projects are normally associated with research (выполнять) in the university.
- 2. When (конструировать) new types of tractors all the latest achievements of scientific and engineering progress are taken into account.
- 3. The rapidity of change in materials technology is typified by plastics (использовать) in large volumes.
- 4. When (брать) a work break on the assembly line workers are replaced by other workers.
- 5. The final years of the program provide a great deal of flexibility (позволять) you to specialize in those subjects which most interest you.

# 4. ЗАДАНИЯ ПО УПРАВЛЯЕМОЙ САМОСТОЯТЕЛЬНОЙ РАБОТЕ И РЕКОМЕНДАЦИИ ПО ИХ ВЫПОЛНЕНИЮ

# Teмa: Agriculture; inventors and their inventions; history of land transport

Студенту необходимо вспомнить изученный теоретический материал о начальном техническом переводе, грамматических особенностях технического английского языка, переводе технических терминов, последовательности работы при переводе, а также, методику составления реферата и аннотации, образцы клиширования рефератов и аннотаций на иностранном языке, образцы реферата и аннотации на иностранном языке.

Предлагаются задания для УСРС 3 уровней сложности:

- уровень А (репродуктивный) максимальная оценка знаний-6;
- уровень В (репродуктивный) максимальная оценка знаний-8;
- уровень С (репродуктивный) максимальная оценка знаний-10.

Уровень сложности заданий определяется количеством знаков на перевод, объемом текста, степенью сложности текста.

Каждый уровень УСРС по модулю содержит 3 задания:

- 1. Translate the highlighted paragraph. Use the dictionary. (Переведите выделенный фрагмент текста, используйте словарь)
- 2. Make up a plan of the text. Find and write down the key words to each point of the plan. (Составьте план текста, найдите и выпишите ключевые слова к каждому пункту плана)
  - 3. Make up a summary of the text.(Составьте реферат текста)

#### Образцы УСРС по модулю «Ведение в специальность»

#### Уровень А

Task 1. Translate the highlighted paragraph. Use the dictionary.

Agricultural economics originally applied the principles of economics to the production of crops and livestock — a discipline known as agronomics. Agronomics was a branch of economics that specifically dealt with land usage. It focused on maximizing the crop yield while maintaining a good soil ecosystem. Throughout the 20th century the discipline expanded and the current scope of the discipline is much broader. Agricultural economics today includes a variety of applied areas, having considerable overlap with conventional economics.

The field of agricultural economics can be traced out to works on land economics. Henry Charles Taylor was the greatest contributor with the establishment of the Department of Agricultural Economics at Wisconsin in 1909. Another contributor, Theodore Schultz was among the first to examine development economics as a problem related directly to agriculture.

Agricultural economists have made many well-known contributions to the economics field with such models as the cobweb model, hedonic regression pricing models, new technology and diffusion models, multifactor productivity and efficiency theory and measurement, and the random coefficients regression. The farm sector is frequently cited as a prime example of the perfect competition economic paradigm.

Task 2. Make up a plan of the text. Find and write down the keywords to each point of the plan.

Task 3. Make up a summary of the text.

#### Уровень В

Task 1. Translate the highlighted paragraph. Use the dictionary.

Agriculture has played a key role in the development of human civilization. Until the Industrial Revolution, the vast majority of the human population labored in agriculture. Development of agricultural techniques has steadily increased agricultural productivity, and the widespread diffusion of these techniques during a time period is often

called an agricultural revolution. A remarkable shift in agricultural practices has occurred over the past century in response to new technologies. In particular, the Haber-Bosch method for synthesizing ammonium nitrate made the traditional practice of recycling nutrients with crop rotation and animal manure less necessary.

The percent of the human population working in agriculture has decreased over time. Synthetic nitrogen, along with mined rock phosphate, pesticides and mechanization, have greatly increased crop yields in the early 20th century. Increased supply of grains has led to cheaper livestock as well. Further, global yield increases were experienced later in the 20th century when high-yield varieties of common staple grains such as rice, wheat, and corn (maize) were introduced as a part of the Green Revolution. The Green Revolution exported the technologies (including pesticides and synthetic nitrogen) of the developed world to the developing world. Thomas Malthus famously predicted that the Earth would not be able to support its growing population, but technologies such as the Green Revolution have allowed the world to produce a surplus of food.

Task 2. Make up a plan of the text. Find and write down the keywords to each point of the plan.

Task 3. Make up a summary of the text.

### Уровень С

Task 1. Translate the highlighted paragraph. Use the dictionary.

Cropping systems vary among farms depending on the available resources and constraints; geography and climate of the farm; government policy; economic, social and political pressures; and the philosophy and culture of the farmer. Shifting cultivation (or slash and burn) is a system in which forests are burnt, releasing nutrients to support cultivation of annual and then perennial crops for a period of several years. Then the plot is left fallow to regrow forest, and the farmer moves to a new plot, returning after many more years (10-20). This fallow period is shortened if population density grows, requiring the input of nutrients (fertilizer or manure) and some manual pest control. Annual cultivation is the next phase of intensity in which there is no fallow period. This requires even greater nutrient and pest control inputs.

Further industrialization lead to the use of monocultures, when one crop is planted on a large acreage. Because of the low biodiversity, nutrient use is uniform and pests tend to build up, necessitating the greater use of pesticides and fertilizers. Multiple cropping, in which several crops are grown sequentially in one year, and intercropping, when several crops are grown at the same time are other kinds of annual cropping systems known as polycultures.

In tropical environments, all of these cropping systems are practiced. In subtropical and arid environments, the timing and extent of agriculture may be limited by rainfall, either not allowing multiple annual crops in a year, or requiring irrigation. In all of these environments perennial crops are grown (coffee, chocolate) and systems are practiced such as agroforestry. In temperate environments, where ecosystems were predominantly grassland or prairie, highly productive annual cropping is the dominant farming system.

Task 2. Make up a plan of the text. Find and write down the keywords to each point of the plan.

Task 3. Make up a summary of the text.

#### 5. ПРИМЕРЫ ЗАДАНИЙ ДЛЯ КОНТРОЛЯ РЕЗУЛЬТАТОВ ИЗУЧЕНИЯ МОДУЛЯ

Образец итогового лексико-грамматического теста по модулю «Введение в специальность»

Методические рекомендации для написания итогового лексико-грамматического теста по модулю:

Для написания итогового лексико-грамматического теста по модулю необходимо:

- 1. Повторить теоретический грамматический материал по модулю из раздела «Научно-теоретическое содержание модуля»;
- 2. Повторить словарь-минимум лексических единиц и речевых моделей по теме «Введение в специальность» (тексты A, B);
- 3. Выполнять задания необходимо в том порядке, в каком они даны в тесте.

#### Exercise 1. Fill in the gaps with the correct words in brackets.

- 1. Scientists develop new systems of ... (*improving*, *growing*) soil conditions.
- 2. Farmers use the land for growing various crops and breeding ... (farm equipment, livestock).
- 3. The development of mechanical ...(power, steam) for farm work led to the Industrial revolution.
- 4. At present our agronomists ... (are improving, are improved) crop quality and yields.
- 5. When the students came to the laboratory the scientist ... (made, was making) a soil test.

#### **Exercise 2. Choose the correct word in brackets.**

- 1. In modern practice plowing is being done by various (*grasses*, *plows*, *crops*).
- 2. The (application, equipment, pig-growing) in his laboratory is modern and useful.
- 3. "Where were you at about 10 a.m. yesterday?" "Oh, I (mount, was mounting, mounted) a plow."

- 4. We usually (*mechanize*, *differ*, *grow*) vegetables in our garden but this year we don't grow any.
- 5. Nowadays an engineer ...(is being made, is making, made) a vast contribution in design and engineering.

### Exercise 3. Complete the sentences with the appropriate words in brackets.

Organic ... 1. (farming, fertilizers, implement, system) is the form of agriculture that relies on ... 2. (livestock, crop rotation, sugar beet, farming) green manure, compost, biological pest control, and mechanical cultivation to maintain soil ...3. (growth, introduction, productivity, responsibility) and control pests, excluding or strictly limiting the use of synthetic fertilizers and synthetic pesticides, etc. Approximately 32.2 million hectares worldwide are now farmed organically, ... 4. (representing, are represent, is representing, represent) approximately 0.8 percent of total world farmland. A lot of farmers ... 5. (is using, are using, was use, used) organic farming now.

# 5.2. Задания для рубежного контроля по модулю «Введение в специальность»

## Методические рекомендации для рубежного контроля по уровням сложности:

- (A) студенты должны знать словарь-минимум лексических единиц и речевых моделей по теме «Сельское хозяйство и Механизация сельского хозяйства»; уметь осуществлять перевод отдельных предложений по теме с английского языка на русский язык; уметь отвечать на общие вопросы по теме; уметь сделать устное сообщение по любой из ситуаций уровня А (6-8 развернутых предложений);
- (В) студенты должны знать словарь-минимум лексических единиц и речевых моделей по теме «Сельское хозяйство и Механизация сельского хозяйства»; уметь осуществлять перевод отдельных словосочетаний и простых предложений по теме с русского языка на английский язык; уметь отвечать на вопросы по теме; уметь вести беседу по любой из ситуаций уровня В (8-10 развернутых предложений);

### Перечень ситуаций для рубежного контроля по уровням сложности:

#### Уровень А

- 1. At the students' conference you are to make a report about factors increasing crop yields. What are you going to speak about? Make use of the chart.
  - 2. Speak about the history of farm mechanization.
  - 3. Give a brief presentation of agriculture in general.
  - 4. What is called cattle farming?
  - 5. What are the characteristics of crop plants?

#### Уровень В

- 1. Imagine you are a head of an agricultural enterprise. Your farm specializes in crop growing. What agrotechnical methods and measures do you have to use to increase yields of grain and other crops?
- 2. Imagine you are a chief engineer of an agricultural enterprise. Your farm specializes in livestock breeding. What agrotechnical methods and measures do you have to use to obtain high yields of animal produce? Which is one of the principle problems cattle-breeding faces nowadays?
- 3. What type of power was of the greatest significance for mankind? Give reasons for your opinion.
- 4. Why were new farming methods important to the Agricultural Revolution?
- 5. Why should the farmers care about environment applying fertilizers?

#### Уровень С

1. a) Complete the chart below; b) Speak about historical milestones in engineering development.

Time	Inventor	Invention	What is new for agriculture?	Result
2011				

- 2. What major scientific advances in agriculture are going to take place in your lifetime? Describe them and explain why they are going to happen.
- 3. In order to avert the next food crisis should world governments encourage their farmers to grow more alternate crops (sorghum, bean, barley, etc.) and with lower grain to meat ratio (goats and rabbits)?
  - 4. What would happen if farmers all switched to organic crops?
- 5. Your family has a 6-7 acre farm and you would love to do animals or plant something. What is the best farm animal or crop for a small hobby farm?
- 6. How does improving agriculture help create opportunities and reduce poverty?

#### 6. ОТВЕТЫ К ТЕСТОВЫМ ЗАДАНИЯМ

#### Ответы к итоговому лексико-грамматическому тесту

	1. improving
	2. livestock
Exercise 1	3. power
	4. are improving
	5. was making
	1. plows
	2. equipment
Exercise 2	3. was mounting
	4. grow
	5. is making
	1. 1. farming
	2. crop rotation
Exercise 3	3. productivity
	4. representing
	5. are using

#### Учебное издание

### АНГЛИЙСКИЙ ЯЗЫК

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